CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SANTA ANA REGION

ORDER NO. R8-2002-0057

WASTE DISCHARGE REQUIREMENTS FOR ROADWAY EXPRESS BRINE WASTE DISPOSAL FACILITY CLASS II SURFACE IMPOUNDMENT SAN BERNARDINO COUNTY

The California Regional Water Quality Control Board, Santa Ana Region (hereinafter Board), finds that:

- 1. Roadway Express (hereinafter discharger) is an express freight transfer station that transports business commodities throughout the United States and overseas. The facility is located in Bloomington at 34° 03' 54" north latitude and 117° 24' 15" west longitude, as shown on Attachment A, which is hereby made a part of this order.
- 2. The discharger is proposing to construct and operate a brine waste disposal facility (brine ponds) consisting of two brine ponds, at the freight transfer station. The brine ponds will receive wastewater discharges from a truck wash facility. The truck wash will include an automated truck wash bay and a preventive maintenance wash bay. The automated wash bay will be utilized for the sole purpose of washing trucks. To conserve water, wastewater from the automated wash bay will be recycled approximately nine times before the wastewater is discharged to the brine ponds. Approximately 60 gallons of wastewater per truck will be discharged from the automated wash bay into the brine ponds. The total annual discharge from the automated bay area will be approximately 1,423,500 gallons per year. In contrast, the preventive maintenance wash bay is intended mainly for engine degreasing and washing of the undercarriages of trucks. Wastewater from the preventive maintenance bay will not be recycled. The preventive maintenance bay also incorporates an oil-water separator to eliminate the discharge of oil to the brine ponds. Approximately 300 gallons of wastewater per truck will be discharged from the preventive maintenance wash bay for a total annual discharge of 492,750 gallons per year. The combined annual wastewater volume from the automated and preventive maintenance bays will be approximately 1,916,250 gallons per year.
- 3. The brine ponds will be constructed in accordance with the requirements in California Code of Regulations Title 27, and Resolution No. 93-62. The proposed design includes the construction of two geosynthetic-lined brine ponds having capacities of 1,263,000 and 893,000 gallons. The liner containment system will include two 40-mil low linear density polyethylene (LLDPE) liner material with a drainage layer between them that drains to a monitoring sump. The drainage layer and sump function as a leak detection and collection system. This system allows for monitoring the integrity of the primary liner by directing any leaked liquids into the monitoring sump where it can be measured and sampled.

- 4. The liner manufacturer has indicated that the LLDPE liner material has a life span of approximately 20 years. However, the liner manufacturer will only warranty the material for 10 years. Therefore, after 10 years, the liner material may become more prone to failure, which could result in the release of contaminated liquids to groundwater. The discharger may either replace the liner system, or may continue to utilize the existing containment system provided that an annual leak test is conducted on the liner material to evaluate its integrity. If evidence of liner failure is revealed by any annual leak test, then the discharger must discontinue use of that pond immediately and submit a workplan for the installation of a new liner containment system.
- 5. A revised Water Quality Control Plan for the Santa Ana Region (Basin Plan) became effective on January 24, 1995. The Basin Plan contains beneficial uses and water quality objectives for waters in the Santa Ana Region. The requirements contained in this order are necessary to implement the Basin Plan.
- 6. The facility overlies the Chino II Groundwater Subbasin, the beneficial uses of which include:
 - a. Municipal and Domestic Supply
 - b. Agricultural Supply
 - c. Industrial Service Supply
 - d. Industrial Process Supply
- 8. The Basin Plan established the following Water Quality Objectives for the Chino II Groundwater Subbasin:
 - a. Total Dissolved Solids (TDS) 330 mg/l
 - b. Hardness 185 mg/l
 - c. Sodium 18 mg/l
 - d. Chloride 18 mg/l
 - e. Nitrate nitrogen, NO₃-N 6 mg/l
 - f. Sulfate, SO₄ 20 mg/l
- 9. The discharge of high salinity wastes to the ground, other than to impervious facilities, is prohibited by the Basin Plan. These wastes are classified as designated wastes pursuant to Title 27. In accordance with Title 27, facilities that receive designated waste discharges are regulated as Class II facilities.
- 10. An Environmental Impact Report (EIR) was prepared for the entire Roadway Express Freight Transfer Facility in accordance with § 15167 of the California Environmental Quality Act (Guidelines). On June 13, 2000, the County Board of Supervisors certified the EIR. Board staff has reviewed the EIR and finds that if the project is carried out in a manner that implements the mitigation measures in the EIR and the requirements specified in this order, there should be no adverse environmental impacts, and water quality will be adequately protected. An addendum to the EIR that addressed the

- brine pond as the mitigation for the brine waste disposal was prepared and approved by the County of San Bernardino on July 22, 2002.
- 11. The Board has notified the discharger and interested agencies and persons of its intent to prescribe waste discharge requirements (WDRs) for the facility, and has provided them with an opportunity to submit their written views and recommendations.
- 12. The Board, in a public meeting, heard and considered all comments pertaining to the discharge.

IT IS HEREBY ORDERED that the discharger, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. WASTE DISCHARGE SPECIFICATIONS

- 1. All wastewater shall be maintained on property owned or controlled by the discharger.
- 2. Prior to the use of the brine waste ponds, an electric leak detection survey must be performed on the ponds to determine the integrity of the containment system. If it is determined that the containment system is faulty, all leaks must be repaired. Certification must be provided to the Regional Board that the liner has no leaks before liquid waste discharges can take place.
- 3. A freeboard of at least 24 inches, measured vertically from the water surface to the lowest point on the top edge of the pond liner, shall be maintained in both ponds at all times.
- 4. The discharge of wastes to any brine pond is prohibited if freeboard is less than 24 inches in that pond.
- 5. The discharge of hazardous waste or designated wastes other than brine waste to the brine ponds is prohibited.
- 6. The discharge shall neither cause nor contribute to the contamination or pollution of surface water, soil or soil-pore liquid beneath the brine ponds, or groundwater, through the release of waste constituents.
- 7. The operation of the brine ponds shall not cause a discharge of pollutants into waters of the United States, including wetlands, that violates any requirements of the Clean Water Act, including, but not limited to, the National Pollutant Discharge Elimination System (NPDES) requirements, pursuant to Section 402.

- 8. The discharge shall not cause the concentration of any Constituents of Concern (COC)¹ or monitoring parameter to exceed its respective background at any monitoring point assigned to detection monitoring pursuant to the attached Monitoring and Reporting Program (M&RP) No. R8-2002-0057.
- 9. After 10 years of pond use, the discharger must either:
 - a. Completely replace the primary liner system, or
 - b. The discharger must conduct an annual leak test on the liner system to evaluate its integrity. If evidence of liner failure is revealed by any annual leak test, then the discharger must discontinue use of that pond immediately and submit a workplan for the installation of a new liner containment system.

PROVISIONS

- 10. The discharger shall comply with all waste discharge specifications, provisions, and monitoring and reporting requirements of this order immediately upon its adoption.
- 11. Compliance with these requirements shall be evaluated based on the following:
 - a. Periodic inspection by Board staff;
 - b. Evaluation of the monitoring reports submitted in accordance with the attached monitoring and reporting program; and
 - c. Any other relevant information.
- 12. The discharger shall permit Board staff:
 - a. To enter, photograph, and inspect any part of the facility at which a discharge source is located;
 - b. To copy any records required to be kept under terms and conditions of this order; and
 - c. To sample any discharges.
- 13. The discharger shall maintain a copy of this order at the site so as to be available at all times to site operating personnel.

[&]quot;Constituents of Concern" are those constituents which are likely to be in the waste in the unit or which are likely to be derived from waste constituents, in the event of a release. The Constituents of Concern are listed in Tables B and C of the Monitoring and Reporting Program.

- 14. The discharger shall install a groundwater monitoring well network in accordance with an approved monitoring well design and installation workplan.
- 15. The discharger shall implement a monitoring and reporting program in accordance with the attached M&RP No. R8-2002-0057 in order to detect, at the earliest opportunity, any unauthorized discharge of waste constituents from the brine ponds, or any unreasonable impairment of beneficial uses caused by or associated with discharges of waste to the brine ponds.
- 16. If the Detection Monitoring Program detects a release of waste constituents at any on-site or downgradient monitoring wells in excess of the water quality protection standards established by the Executive Officer of the Board, the discharger shall institute an Evaluation Monitoring Program in accordance with §20425 of Title 27.
- 17. If the Evaluation Monitoring Program establishes that any water quality protection standard has been exceeded at any ground water monitoring point, the discharger shall institute a Corrective Action Program in accordance with §20430 of Title 27.
- 18. At any time, the discharger may file a written request, including appropriate supporting documents, with the Executive Officer of the Board, proposing any appropriate modifications to M&RP No. R8-2002-0057. The discharger shall implement any changes in the revised M&RP approved by the Executive Officer upon receipt of a signed copy of the revised M&RP.
- 19. The discharger shall notify the Executive Officer of the Board by telephone (909-782-4130) within 24 hours of any failure of facilities necessary to maintain compliance with requirements in this order. This notification shall be followed within 5 days by a written report to the Executive Officer. The report shall include, at a minimum, the following:
 - a. The approximate date and time of the discharge;
 - b. The flow rate and duration of the discharge;
 - c. The type and source of the discharge;
 - d. The location(s) where discharge(s) occurred;
 - e. Water sample collection points, with chain of custody records;
 - f. The cause of the discharge; and
 - g. A description of corrective actions implemented.

- 20. The discharger shall file a report of waste discharge with the Board at least 120 days before making any material or proposed changes to the operations of the brine ponds, or changes in the character, location, volume, or disposal methods of the discharge.
- 21. The discharger shall at all times maintain and utilize an approved operations plan, which shall include the following:
 - a. A description of the waste materials anticipated to be generated at the facility;
 - b. A map showing the boundaries of the disposal site and waste disposal areas;
 - c. A general description of disposal site operations;
 - d. The ground water monitoring program and other monitoring programs; and
 - e. Anticipated land use after termination of disposal operations.
- 22. The discharger shall notify the Board in writing of any proposed change in ownership or responsibility for construction, operation, closure or post-closure maintenance of the brine ponds. This notification shall be given prior to the effective date of the change and shall include a statement by the new discharger that construction, operation, closure, and post-closure maintenance will be in compliance with any existing WDRs and any revisions thereof.
- 23. In the event of any change in control or ownership of land or waste discharge facilities currently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this order by letter. A copy of this letter shall be signed by the new owner accepting responsibility for complying with this order, and shall be forwarded to the Executive Officer.
- 24. If any portion of the facility is to be closed, the discharger shall notify the Executive Officer of the Board at least 180 days prior to beginning any partial or final closure activities. The site closure must be performed in accordance with a closure plan approved by the Executive Officer of the Regional Board and must conform to all applicable federal and state requirements.
- 25. Upon ceasing disposal operations at the facility, all remaining liquid wastes shall be completely removed from the site and disposed of in a manner approved by the Executive Officer.

- 26. Ninety days prior to the cessation of disposal operations at the facility, the discharger shall submit a workplan, subject to approval of the Executive Officer, for assessing the extent, if any, of contamination of natural geologic materials, groundwater, and surface waters (including ephemeral stream channels) by wastes. Within 120 days following workplan approval, the discharger shall submit an engineering report presenting results of the contamination assessment. A California registered civil engineer or certified engineering geologist must prepare the workplan, contamination assessment, and engineering report.
- 27. The discharger shall establish an irrevocable closure fund or provide other means to ensure closure and post-closure maintenance of the brine ponds. The closure fund shall be established (or evidence of an existing, irrevocable closure fund shall be provided) within 12 months of the adoption of this order.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on September 6, 2002.

Gerard J. Thibeault Executive Officer

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD SANTA ANA REGION

MONITORING AND REPORTING PROGRAM NO. R8-2002-0057 FOR ROADWAY EXPRESS BRINE WASTE DISPOSAL FACILITY CLASS II SURFACE IMPOUNDMENT

A. GENERAL

- 1. This Monitoring and Reporting Program (M&RP) establishes the requirements for monitoring and reporting associated with the lined surface impoundments and ground water monitoring wells for the Roadway Express Brine Waste Disposal Facility (brine ponds).
- 2. The discharger shall perform all monitoring activities in compliance with the water quality protection standards (water standards), and requirements of Title 27, §20405.
- 3. Sample collection, storage, and analysis shall be performed according to the most recent version of Standard U.S. EPA Methods (U.S. EPA Publication SW-846).
- 4. Pursuant to §13176, Article 4, Chapter 3, Division 7 of the California Water Code, a laboratory certified by the State Department of Health Services shall perform all analyses. Specific methods of analysis must be identified.
- 5. All reports shall be signed by a responsible officer or a duly authorized representative of the discharger and shall be submitted under penalty of perjury.
- 6. All reports shall be maintained by the discharger and shall be retained for a minimum of 5 years.
- 7. The Executive Officer of the Board is hereby authorized to amend this M&RP.

B. SITE MONITORING

- 1. The volume of wastewater discharged to each pond and the total volume of wastewater discharged to both ponds shall be recorded monthly.
- 2. Each pond's freeboard shall be recorded in a permanent log on a weekly basis. A summary of these observations shall be included in the quarterly report submittal. The permanent log shall be kept on site, and made available to Board staff upon request.
- 3. The presence and level of any liquid in each pond's leachate collection and recovery system (LCRS) sump and any volume of liquid pumped from the LCRS back to the ponds shall be monitored and recorded each week. The discharger shall evaluate any amount of liquid in the sump and any amount pumped to the ponds from the LCRS to determine if the liquid is condensate or if it indicates leakage from the primary liner system. The discharger shall collect weekly samples of the liquid in the LCRS and in

each pond, and shall analyze these samples for specific conductance, measured in micromhos/centimeter. A summary of these observations and the specific conductance data shall be included in the quarterly report submittals.

- 4. Significant increases in specific conductance levels in the LCRS sump liquid or in volume of liquid pumped from the LCRS and returned to the ponds shall be investigated in accordance with the operations plan. If either the discharger or the Board determines that there is significant physical evidence of leakage through the primary liner and into the LCRS sump, the discharger shall perform the following steps:
 - a. Collect a sample of the liquid and analyze it for the monitoring parameters in Table C of this M&RP;
 - b. Pump out all liquid from the LCRS sump;
 - c. Inspect the LCRS sump daily for a period of 7 consecutive days for evidence of additional liquid;
 - d. If no additional liquid has accumulated in the LCRS sump within the 7-day period, the discharger can return to the weekly inspection program;
 - e. If liquid has accumulated in the LCRS sump within the 7-day period, then the discharger shall immediately notify the Board of this fact and shall submit a corrective action proposal and an implementation schedule within 30 days.
- On the last working day of each week, the discharger shall visually examine the integrity of the exterior structure and liner of the ponds for cracking and leakage, and record the findings in a permanent log. Any unusual appearance in the pond's exterior structure, such as a leak or crack, and any indication of liner leakage, shall be reported within 24 hours to the Executive Officer of the Board by phone at (909) 782-4130. A written report must be submitted within 5 days, and must include the following:
 - a. Description of discharge;
 - b. Possible cause of discharge;
 - c. Period of discharge, including date and time; and
 - d. Steps taken to identify and resolve the problem.

C. MONITORING PROGRAM

1. General

- a. Water quality protection standards shall be established in compliance with the requirements set forth in Title 27, §20390.
- b. The discharger shall develop and update the Constituents of Concern¹ (COC) list in accordance with Title 27, §20395, as follows:
 - i. Annually in April, analyze the brine wastewater in each pond for all constituents listed in Table B;
 - ii. Constituents that are newly detected through this process shall be added to the facility's COC list, and shall become part of the facility's regular groundwater monitoring program.
- c. The concentration limit for each COC and monitoring parameter shall be established in accordance with Title 27, §20400, and shall be used as the basis of comparison with water quality data from the facility's monitoring points.
- d. Monitoring points and the point of compliance shall be established in accordance with Title 27, §20405.
- e. The water quality compliance monitoring period for the facility shall be equal to the number of years the facility is active plus the closure period, or until the facility is determined to no longer pose a threat to water quality.
- f. The discharger shall propose a data analysis method pursuant to Title 27, §20415(e)(8).
- g. The discharger shall install any additional ground water or soil-pore liquid monitoring devices determined by the Executive Officer of the Board to be necessary to comply with this Order.
- h. The discharger shall perform a leak survey test on the liner prior to the initial discharge to the ponds.

Constituents of Concern are those constituents that are likely to be in the waste or that are likely to be derived from waste
constituents in the event of a release.

2. Water Quality Monitoring

The discharger shall comply with the requirements of Title 27, §20415 for groundwater quality monitoring, as follows:

- The discharger shall conduct a Detection Monitoring Program (DMP), pursuant to Title 27, §20420.
- b. The discharger shall institute an Evaluation Monitoring Program (EMP) pursuant to Title 27, §20425, whenever there is evidence of a release from the brine ponds during the DMP. The discharger shall implement the EMP within 90 days after approval of the EMP by Board staff. The EMP shall be used to assess the nature and extent of the release from the facility, and to design a Corrective Action Program (CAP).
- c. Within 90 days of completion of the EMP, the discharger shall submit an Engineering Feasibility Study (EFS) and an amended Report of Waste Discharge (ROWD), pursuant to Title 27, §20425(c), and (d), to establish a CAP.
- d. The discharger shall implement the approved CAP, pursuant to Title 27, §20430, when the Executive Officer determines that the EMP and the design of the CAP have been satisfactorily completed, and the amended ROWD, submitted pursuant to Item c, above, has been approved.
- e. The compliance period for the CAP shall end when the discharger can demonstrate, to the satisfaction of the Executive Officer, that the site has been in continuous compliance with its water quality protection standards for a period of 3 consecutive years.

D. QUARTERLY REPORTING

- 1. All monitoring reports shall be submitted in accordance with the schedule shown in Table A. The discharger may propose an alternate schedule for approval of the Executive Officer.
- 2. The reports shall include, at a minimum, the following:
 - a. A summary and interpretation of all monitoring data collected from the monitoring wells, wastewater ponds, and the LCRS sumps during the past monitoring period, including, at a minimum:
 - i. A description and graphical presentation (e.g., arrow on a map) of the direction of ground water flow beneath the facility, based on water level elevations taken during the collection of the water quality samples. Water levels must be measured prior to purging the wells;

- ii. For each monitoring well addressed by the report, a description of the method and time of water level measurement, and a description of the method of purging used to remove stagnant water in the well before sampling, pursuant to Title 27, §20415(e)(12)(B); and
- iii. For each monitoring point addressed by the report:
 - (a). A description of the type of pump or other device used, and its vertical placement for sampling; and
 - (b). A detailed description of the sampling procedure, including number and description of the samples, field blanks, travel blanks, and duplicate samples taken; the types of containers and preservatives used; the date and time of sampling; the name and qualifications of the person actually taking the samples; and any other observations.
- b. Tabulated and graphed results of all analyses performed to demonstrate compliance with the requirements of this Order;
- c. An evaluation of the effectiveness of the monitoring and containment facilities;
- d. A map showing the locations of observation stations and monitoring points;
- e. A summary and certification of completion of all visual monitoring and observations for the ponds;
- f. The type and volume of wastewater discharged to the ponds since the submittal of the last report; and
- g. A summary and discussion of any violations that occurred during the past monitoring period, and all actions taken or planned to correct these violations.

E. ANNUAL REPORT

On January 31 of each year, the discharger shall submit an annual report to the Board covering the previous year's monitoring. This report may be submitted along with the fourth quarter detection monitoring report. The annual report shall contain:

- 1. A summary of the previous year's activities, including a summary of any violations of the requirements contained in this Order.
- 2. Tabulated results of all analyses performed to demonstrate compliance with the requirements of this Order;

- 3. Graphs of the analytical data, plotted in accordance with the requirements outlined in Title 27, §20415(e)(14);
- 4. A summary and interpretation of the analytical results of water and wastewater chemistry, indicating any changes made or observed since the previous annual report:
- 5. The total volume of wastewater discharged to the ponds;
- 6. A summary of the status of the ponds, including a summary of the observations noted during routine inspections and a summary of all repairs and maintenance:
- 7. A summary of any changes made to the design or operation of the ponds since the previous annual report; and
- 8. A report that validates the maintenance of the financial assurance mechanism, or proposes and substantiates any needed changes.

F. **CONTINGENCY REPORTING**

Immediately upon discovery, the discharger shall report by telephone any spills, or leakage from the ponds, including the presence of any liquids in the LCRS sump. A written report containing at least the following information shall be filed with the Executive Officer within 5 days of the initial report:

- 1. A map showing the location(s) of the spill, or leakage, if known;
- 2. An estimate of the flow rate;
- 3. A description of the nature of the discharge (i.e., all pertinent observations and analyses); and
- 4. Corrective measures underway or proposed, along with a time schedule for their implementation, if necessary.

I, Gerard J. Thibeault, Executive Officer, do hereby certify that the foregoing is a full, true and correct copy of an order adopted by the California Regional Water Quality Control Board, Santa Ana Region, on September 6, 2002.

Ordered by Gerard J. Thibeault Executive Officer

ATTACHMENT 1 REQUIRED WATER QUALITY MONITORING PROGRAMS

Type of Program	Monitoring Parameters	Monitoring Frequency
Detection water quality monitoring	Appendix I constituents (Table B) And Inorganic parameters (Table C)	Quarterly
April brine wastewater COC analysis	Appendix I constituents (Table B) And Inorganic parameters (Table C)	Annually
Ground water COC analysis	Appendix I constituents (Table B) And Inorganic parameters (Table C)	Once every 5 years

TABLE A MONITORING AND REPORTING SCHEDULE

Task Description	Monitoring Period	Report Due Date	
Quarterly water quality monitoring	January 1 – March 31	April 30 of each year	
	April 1 – June 30	July 31 of each year	
	July 1 – September 30	October 31 of each year	
	October 1 – December 31	January 31 of each year	
Quarterly general site Monitoring	January 1 – March 31	April 30 of each year	
	April 1 – June 30	July 31 of each year	
	July 1 – September 30	October 31 of each year	
	October 1 – December 31	January 31 of each year	
April brine wastewater COC analysis	April	July 31 of each year	
Ground water COC analysis	October 2000	January 31, 2001	
	April 2005 and every fifth year thereafter, alternately in October and April	July 31, 2005 and every fifth year thereafter, alternately on January 31 and July 31	
Annual leak survey test	April 2012 and every year thereafter	July 31, 2012 and every year thereafter	
Annual summary	January 1 – December 31	January 31 of each year	

TABLE B

APPENDIX I CONSTITUENTS OF CONCERN

Inorganic Constituents	Organic Constituents – continued	
Antimony	p-Dichlorobenzene; 1,4-Dichlorobenzene	
Arsenic	Trans-1,4-Dichloro-2-butene	
Barium	1,1-Dichloroenthane; Ethylidene chloride	
Beryllium	1,2-Dichloroethane; Ethylene dichloride	
Cadmium	1,1-Dichloroethylene; 1,1-Dichloroethene;	
	Vinylidene chloride	
Chromium	Cis-1,2-Dichloroethylene; cis-1,2-	
	Dichloroethene	
Cobalt	Trans-1,2-Dichloroethylene; trans-1,2-	
	Dichloroethene	
Copper	1,2-Dichloropropane; Propylene dichloride	
Lead	Cis-1,3-Dichloropropene	
Nickel	Trans-1,3-Dichloropropene	
Selenium	Ethylbenzene	
Silver	2-Hexanone; Methyl butyl ketone	
Thallium	Methyl bromide; Bromomethane	
Vanadium	Methyl chloride; Chloromethane	
Zinc	Methylene bromide; Dibromomethane	
	Methylene chloride; Dichloromethane	
Organic Constituents	Methyl ethyl ketone; MEK; 2-Butanone	
Acetone	Methyl iodide; lodomethane	
Acrylonitrile	4-Methyl-2-pentanone; Methyl isobutyl ketone	
Benzene	Styrene	
Bromochloromethane	1,1,1,2-Tetrachloroethane	
Bromodichloromethane	1,1,2,2-Tetrachloroethane	
Bromoform; Tribromomethane	Tetrachloroethylene; Tetrachloroethene;	
	Perchloroethylene	
Carbon disulfide	Toluene	
Carbon tetrachloride	1,1,1-Trichloroethane; Methylchloroform	
Chlorobenzene	1,1,2-Trichloroethane	
Chloroethane; Ethyl chloride	Trichloroethylene; Trichloroethene	
Chloroform; Trichloromethane	Trichlorofluoromethane; CFC-11	
Dibromochloromethane;	1,2,3-Trichloropropane	
Chlorodibromomethane		
1,2-Dibromo-3-chloropropane; DBCP	Vinyl acetate	
1,2-Dwibromoethane; Ethylene dibromide; EDB	Vinyl chloride	
o-Dichlorobenzene; 1,2-Dichlorobenzene	Xylenes	

TABLE C

INORGANIC CONSTITUENTS OF CONCERN

Parameter	EPA Method	Parameter	EPA Method
Total Hardness	130	Total Dissolved Solids	160.1
Bicarbonate (HCO ₃)	310.2	Chemical Oxygen Demand	410
Carbonate (CaCO ₃)	310.2	Phenols	420.1
Total Alkalinity	310.1	Total Organic Carbon	415
Total Cations	2	Total Organic Halogens	450.1
Total Anions	2	Calcium (Ca)	200.7/215
Hydroxide (OH)	3	Magnesium (Mg)	200.7/242.1
Chloride (CI)	325	Manganese (Mn)	200.7/243.1
Fluoride (F)	340	Potassium (K)	200.7/258.1
Nitrate (NO ₃)	353.2	Sodium (Na)	200.7/273.1
Sulfate (SO ₄)	375	Iron (Fe)	200.7/236.1
Phosphate (PO ₄)	365.2	Zinc (Zn)	200.7/289.1
Total Phosphorus	365.1/365.2		
Boron (B)	212.3/200.7		
Specific Conductance	120.1		
(Electrical Conductivity -			
EC)			
Ph	150.1		

² Total cations and anions are determined by the summation of all cations and anions, respectively, in the sample analyzed.

The standard method, SM 2330B, in the "Standard Methods for the Examination of Water and Wastewater" for hydroxide ion analysis shall be used.

California Regional Water Quality Control Board Santa Ana Region

STAFF REPORT

September 6, 2002

Item: 10

Subject: Waste Discharge Requirements for the Roadway Express Brine Disposal

Facility, Bloomington, San Bernardino County, Order No. R8-2002-0057

DISCUSSION:

Roadway Express is proposing to expand its freight transfer station located at 18298 Slover Avenue in Bloomington as shown on attachment "A". The expansion includes the construction of an on-site automated truck washing facility. The discharger has determined that discharges from the truck wash facility would contain elevated levels of inorganic constituents in excess of basin plan objectives. Therefore, in order to comply with basin plan requirements, Roadway Express is proposing to construct and operate two brine waste disposal ponds that will receive wastewater discharges from the proposed truck wash facility.

The truck wash facility will consist of two parts. The automated wash bay and the preventive maintenance bay. The automated wash bay will be an automated truck washing system. Approximately 60 gallons of wastewater will be generated for each truck washed in the automated truck wash bay. The second part of the facility, the preventive maintenance bay, will be utilized to degrease the drive-trains of the trucks. An oil-water separator will be incorporated into the design of the preventive maintenance bay to eliminate the discharge of oil into the brine ponds. Approximately 300 gallons of wastewater per truck will be generated in the preventive maintenance bay area. The combined flow from both the automated wash and preventive maintenance bays is approximately 1,916,250 gallons per year.

The proposed brine waste containment facility will consist of two double-lined brine ponds, designated as ponds A and B. Ponds A and B will have a capacity of approximately 1,263,000 gallons and 893,000 gallons, respectively. The specified minimum freeboard in both ponds is 2 feet measured vertically, as required by Title 27. The containment system for both ponds will consist of primary and secondary 40-mil low-linear density polyethylene (LLDPE) liner with a drainage layer between them that will drain to a monitoring sump. The drainage layer and sump will function as a leak detection and leachate collection system. This system will allow for monitoring of the integrity of the primary (upper) liner by directing any liquids that leak through it into the monitoring sump where it can be measured and sampled. The facility will also include a groundwater monitoring well network.

The liner manufacturer has indicated that they will warranty the liner material for only 10 years. Therefore, Board staff deem it necessary for the liner material to be replaced at the end of the 10-year period. Alternatively, if the discharger desires to continue to utilize the existing liner after 10 years have elapsed, then an annual leak survey test must be preformed on the liner every year starting at the tenth year.

The requirements in Order No. R8-2002-0057 include groundwater monitoring; surface water monitoring; discharge water quality monitoring; freeboard monitoring; inspection of the liner system and monitoring sump; a financial assurance plan; and closure and post-closure plans. These requirements are consistent with Title 27, the Basin Plan, and other State and Federal laws and regulations, and are considered to be adequate for the protection of the beneficial uses of the waters of the region.

RECOMMENDATION:

Staff recommends adoption of Order No. R8-2002-0057 as presented.

Comments were solicited from the following:

State Water Resources Control Board, Division of Clean Water Programs – Joe Mello State Water Resources Control Board, Office of the Chief Counsel – Jorge Leon San Bernardino Co. Environmental Health, Scott Maass